

WHAT IS CLAIMED IS:

1. A method for indicating initial movement of a wheeled ground vehicle from a stop or low-speed condition, comprising the steps of:

5 assessing a rate parameter that is proportional to a rate of vehicle movement along the ground;

 determining whether the vehicle is accelerating; and

 if and only if the rate parameter is greater than zero but less than a predetermined value and the vehicle is accelerating, activating a warning system so as to provide an

10 indication of initial movement of the vehicle.

2. The method of claim 1, wherein the step of activating a warning system comprises illuminating at least one warning light located on the vehicle so as to be visible to persons outside the vehicle.

3. The method of claim 2, further comprising the step of determining whether the
15 movement of the vehicle is in a forward direction or a reverse direction, and wherein the step of illuminating at least one warning light comprises illuminating at least one front warning light if the movement is in the forward direction and illuminating at least one rear warning light if the movement is in the reverse direction.

4. The method of claim 2, wherein the step of illuminating at least one warning
20 light comprises illuminating a pair of warning lights respectively located on opposite sides of the vehicle.

5. The method of claim 2, wherein the step of assessing the rate parameter comprises receiving a signal from a sensor that indicates vehicle wheel rotation and determining the rate parameter based on said signal.

25 6. The method of claim 5, wherein said signal comprises a wheel rotational speed signal and the rate parameter is determined based on said wheel rotational speed signal.

7. The method of claim 6, wherein said wheel rotational speed signal is processed to determine whether the vehicle is accelerating.

8. The method of claim 2, wherein once it has been determined that the rate parameter is greater than zero but less than the predetermined value and the vehicle is accelerating, the at least one warning light is illuminated for a predetermined period of time.

5 9. The method of claim 8, wherein the at least one warning light is continuously illuminated for said predetermined period of time.

10. The method of claim 8, wherein the at least one warning light is illuminated in a flashing manner for said predetermined period of time.

10 11. The method of claim 1, further comprising determining a rate of acceleration of the vehicle, and wherein the warning system is activated if and only if the rate parameter is greater than zero but less than a predetermined value and the rate of acceleration is greater than a predetermined positive nonzero value.

12. An initial movement indicator for a wheeled ground vehicle, comprising:
at least one warning light; and
15 a controller structured and arranged to receive a signal indicative of vehicle movement along the ground and to process said signal to determine a rate parameter that is proportional to a rate of said vehicle movement and to determine whether the vehicle is accelerating, the controller being structured and arranged to cause the at least one
20 warning light to be illuminated if and only if the rate parameter is greater than zero but less than a predetermined value and the vehicle is accelerating.

13. The initial movement indicator of claim 12, wherein the controller is structured and arranged to illuminate the at least one warning light for a predetermined period of time once the controller has determined that the rate parameter is greater than zero but less than the predetermined value and the vehicle is accelerating.

25 14. The initial movement indicator of claim 13, wherein the controller is structured and arranged to continuously illuminate the at least one warning light for said predetermined period of time.

15. The initial movement indicator of claim 13, wherein the controller is structured and arranged to illuminate the at least one warning light in a flashing manner for said predetermined period of time.

5 16. The initial movement indicator of claim 12, wherein the at least one warning light comprises at least one front warning light for warning of forward movement of the vehicle, and the controller is structured and arranged to determine whether the movement of the vehicle is in a forward direction and to illuminate the at least one front warning light only if the movement is in the forward direction.

10 17. The initial movement indicator of claim 16, wherein the controller is structured and arranged to determine based on a signal from a transmission sensor whether the vehicle is in a forward gear and to illuminate the at least one front warning light only if the vehicle is in a forward gear.

15 18. The initial movement indicator of claim 16, wherein the at least one warning light additionally comprises at least one rear warning light for warning of reverse movement of the vehicle, and the controller is structured and arranged to determine whether the movement of the vehicle is in a reverse direction and to illuminate the at least one rear warning light only if the movement is in the reverse direction.

20 19. The initial movement indicator of claim 18, wherein the controller is structured and arranged to determine based on a signal from a transmission sensor whether the vehicle is in a reverse gear and to illuminate the at least one rear warning light only if the vehicle is in a reverse gear.

20. The initial movement indicator of claim 12, wherein the at least one warning light comprises a strobe light.

25 21. The initial movement indicator of claim 12, wherein the at least one warning light comprises a pair of warning lights for respectively mounting on opposite sides of the vehicle.

22. An initial movement indicator for a wheeled ground vehicle, comprising:
at least one warning light;
means for determining a rate parameter proportional to a rate of vehicle
movement along the ground;
5 means for determining whether the vehicle is accelerating; and
means for illuminating the at least one warning light if and only if the rate
parameter is greater than zero but less than a predetermined value and the vehicle is
accelerating.

23. A wheeled ground vehicle, comprising:
10 a body mounted on a set of wheels, the body having a front end, a rear end, a left
side, and a right side;
at least one warning light mounted on the body so as to be visible to persons
outside the vehicle;
a sensor mounted in the vehicle and operable to create a signal indicative of
15 vehicle movement along the ground and the rate of said vehicle movement;
a controller connected to the sensor and to the at least one warning light, the
controller being structured and arranged to process said signal from the sensor to
determine a rate parameter that is proportional to the rate of vehicle movement along the
ground and to determine whether the vehicle is accelerating, the controller being
20 structured and arranged to cause the at least one warning light to be illuminated if and
only if the rate parameter is greater than zero but less than a predetermined value and the
vehicle is accelerating.

24. The wheeled ground vehicle of claim 23, wherein the sensor is structured and
arranged to detect wheel rotation and to create a signal indicative of a rate of said wheel
25 rotation.

25. The wheeled ground vehicle of claim 23, wherein the at least one warning
light comprises a first pair of warning lights respectively mounted on the left and right
sides of the body of the vehicle so as to be visible to persons located on opposite sides of
a path of travel of the vehicle.

26. The wheeled ground vehicle of claim 23, wherein the at least one warning light comprises at least one front warning light mounted proximate the front end of the body and at least one rear warning light mounted proximate the rear end of the body.

27. The wheeled ground vehicle of claim 26, further comprising a sensor
5 operable to create a signal indicative of whether the vehicle movement is in a forward direction or is in a reverse direction, and wherein the controller is arranged to receive said signal indicative of whether the vehicle movement is in a forward direction or is in a reverse direction and is structured and arranged to determine whether the vehicle
10 movement is in a forward direction or a reverse direction and to cause either the at least one front warning light or the at least one rear warning light to be illuminated depending on the direction of vehicle movement.